

Amendments to the Claims

Please amend Claims 1, 3-5, 21, 23-28, and 30-35. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently amended) A data ~~engine-engine~~, located in a programmable pipeline ~~processor-processor~~, for processing non-field delineated, streaming, application level database records received from a mass storage device, the data engine comprising:
 - a data parser configured to parse non-field delineated database records received from the mass storage device into ~~the field-delineated~~field delineated data;
 - filter logic configured to receive field delineated ~~database-records~~data from the ~~database~~data parser, and to filter the field delineated ~~data~~data by performing a field operation on the field delineated ~~database-records~~data; and
 - an output tuple generator, configured to assemble filtered field delineated ~~database-records~~ into an output tuple.
2. (Previously presented) The data engine of claim 1 wherein the filter logic further comprises a programmable memory that serves as a substitution table for field delineated database records, and wherein performing a field operation on the field delineated database records includes performing a field comparison on selected fields of the field delineated data.
3. (Currently amended) The data engine of claim 2 wherein the substitution table includes a ~~data-sting~~data-string register.
4. (Currently amended) ~~The data engine of A processor as in~~ claim 2 wherein the substitution table includes a temporary-data-sting register.
5. (Currently amended) The data engine of claim 2 wherein the field comparison is a character field comparison.

6.-20. (Cancelled)

21. (Currently amended) A method for processing, in a programmable pipeline processor, non-field delineated ~~streaming,~~ streaming, application level database records received ~~in a programmable pipeline processor~~ from a mass storage device, the method comprising:
 - receiving a non-field delineated ~~database records stream~~ in a field buffer as an input data stream;
 - separating the input data stream into field delineated data in the field buffer under instruction from an external central processing unit; ~~and~~
 - filtering the field delineated data by sending field delineated data from the field buffer to at least one logic unit that performs at least one field operation on the field delineated data~~[[.]]; and~~
 - assembling the filtered field delineated data into an output tuple.
22. (Previously presented) The data engine of claim 1 wherein the output tuple assembled by the output tuple generator contains only selected data fields of the field delineated data.
23. (Currently amended) The data engine of claim 1 wherein the filter logic is further configured to filter the field delineated data by flagging ~~a record~~data for further processing.
24. (Currently amended) The data engine of claim 1 further comprising header storage configured to receive header and control data of the field delineated data from the data parser and provide header data to the filter logic, wherein the filter logic is further configured to use header data to filter field delineated data.
25. (Currently amended) The data engine of claim 1 further comprising an ID processing module configured to receive header and control data of the field delineated data, to identify the validity of field delineated data by processing an ID field in the header data ~~of the field oriented data,~~ and to provide the identified validity ~~result~~ to the tuple generator.

26. (Currently amended) The data engine of claim 25 wherein the ID field ~~is-stores~~ a transaction ID associated with the field delineated data.
27. (Currently amended) The method of claim 21 wherein filtering further comprises:
providing using a substitution table for field delineated data; and
performing to perform a field comparison on selected fields of the field delineated data.
28. (Currently amended) The method of claim 27 wherein the substitution table ~~comprises~~ includes a data-string register.
29. (Previously presented) The method of claim 27 wherein the substitution table includes a temporary register.
30. (Currently amended) The method of claim 27 wherein the field comparison is a character field comparison.
31. (Currently amended) The method of claim 21 wherein the output tuple contains only selected data fields of the field delineated data.
32. (Currently amended) The method of claim 21 wherein filtering the ~~filter~~ field delineated data comprises flagging a record data for further processing.
33. (Currently amended) The method of claim 21 further comprising using header storage data of the field delineated data to filter-separate field delineated data.
34. (Currently amended) The method of claim 21 further comprising:
identifying the validity of field delineated data by processing an ID field in ~~the~~ header data of the field ~~oriented-delineated~~ data wherein; and
assembling the filtered data into the output tuple based on the validity of the field delineated data.

35. (Currently amended) The method of claim 34 wherein the ID field ~~is~~stores a transaction ID associated with the field delineated data.